

IN THE CLAIMS

1. (Currently amended) A process for preparing a catalyst for partial oxidation of propylene and iso-butylene represented by the following Chemical Formula 1, which process comprises the steps of:

a) dissolving a metal salt compound comprising

i) a molybdenum salt,

ii) a bismuth salt,

iii) an iron salt,

iv) one or more ~~kinds of~~ salts of metals selected from the group consisting of cobalt, tungsten, vanadium, antimony, and nickel, and

v) one or more ~~kinds of~~ salts of metals selected from the group consisting of potassium, rubidium, and cesium,

in a nitric acid aqueous solution or in an organic acid solution to prepare a catalyst suspension;

b) drying the catalyst suspension of step a) in a microwave oven;

c) pulverizing and molding the dried catalyst of step b) to prepare a catalyst powder; and

d) calcining the catalyst powder obtained in step c) [1.1]

[Chemical Formula 1]



(wherein X is cobalt, tungsten, vanadium, antimony, or nickel,

Y is potassium, rubidium, or cesium,

each of a, b, c, d, and e represents the atomic mole ratio of each metal, and when a is 12, b is 0.5~2, c is 0.5~2, d is 3~8, and e is 0.005~0.2,

and f is determined according to oxidation state of each metal).

2. (Currently amended) The process for preparing a catalyst for partial oxidation of propylene and iso-butylene according to Claim 1, wherein the drying step b) comprises drying the solution in a microwave oven with a wavelength of 600 MHz to 2.5GHz.

3. (Original) The process for preparing a catalyst for partial oxidation of propylene and iso-butylene according to Claim 1, wherein the drying of step b) is carried out for 30 seconds to 5 minutes, for 10 mL of the catalyst suspension.

4. (Original) The process for preparing a catalyst for partial oxidation of propylene and iso-butylene according to Claim 1, wherein the catalyst has a surface area of 10 to 20 m²/g.

5. (Currently amended) A catalyst for partial oxidation of propylene and iso-butylene represented by the following Chemical Formula 1, which is prepared by the process of Claim 1:

[Chemical Formula 1]



(wherein X is cobalt, tungsten, vanadium, antimony, or nickel;

Y is potassium, rubidium, or cesium;

each of a, b, c, d, and e represents the atomic mole ratio of each metal, and when a is 12, b is 0.5~2, c is 0.5~2, d is 3~8, and e is 0.005~0.2; and f is determined according to the oxidation state of each metal $[\text{---}][\text{---}][\text{---}]$

wherein the catalyst has a surface area of 10 to 20 m²/g.